Exemption No. 11328

UNITED STATES OF AMERICA
DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
RENTON, WASHINGTON 98057-3356

In the matter of the petition of

Dassault Aviation

for an exemption from § 25.1447(c)(1) of Title 14, Code of Federal Regulations

Regulatory Docket No. FAA-2015-0146

PARTIAL GRANT OF EXEMPTION

By letter dated January 20, 2015, Mr. Matthieu Amberg, Certification Manager, Dassault Aviation, 78, quai Marcel Dassault - Cedex 300, France, petitioned the Federal Aviation Administration (FAA) for an exemption from the requirements of § 25.1447(c)(1) of Title 14, Code of Federal Regulations (14 CFR). This exemption, if granted would permit relief from the requirement for passenger oxygen masks to be automatically presented before the cabin-pressure altitude exceeds 15,000 feet for the Falcon 5X series airplanes.

The petitioner requests relief from the following regulation:

> **Section 25.1447(c)(1)** requires, in pertinent part, that there must be an oxygen-dispensing unit connected to oxygen-supply terminals immediately available to each occupant, wherever seated. If certification for operation above 30,000 feet is requested, the dispensing units providing the required oxygen flow must be automatically presented to the occupants before the cabin-pressure altitude exceeds 15,000 feet, and the crew must be provided with a manual means to make the dispensing units immediately available in the event of failure of the automatic system.

The petitioner supports its request with the following information:

This section quotes the relevant information from the petitioner's request, with minor edits for clarity. The complete petition is available at the Department of Transportation's Federal Docket Management System, on the Internet at http://regulations.gov, in Docket No. FAA-2015-0146.

Extent of Relief and Reason for Seeking Relief

At the present time, no less than four civilian airports have landing field elevation (LFE) higher than 14,000 feet in China; the highest one, Daocheng Yading Airport, which LFE reaches 14,472 feet above sea level (barometric pressure variations excluded).

In order to have Falcon 5X aircraft operable from and to these airports, Dassault Aviation seeks relief from part of § 25.1447(c)(1) requiring the passenger oxygen dispensing units to be automatically presented to occupants before the cabin pressure altitude exceeds 15,000 feet.

The Falcon 5X oxygen system design includes a "High Airfield" mode for operations to and from airfields with altitudes up to 15,000 feet, for which the threshold for automatic passenger mask deployment is potentially higher than 15,000 feet, in order to accommodate adequate margins with regard to standard atmospheric conditions. In "High Airfield" mode, the deployment threshold of the passenger oxygen masks is automatically set at 15,500 feet (± 500 feet) instead of 14,500 feet (± 500 feet).

On the Falcon 5X, the oxygen system controller is able to change the deployment altitude threshold when high airfield operation is required. In normal mode ("High Airfield" mode deactivated), the threshold is set to 14,500 feet (± 500 feet). When the "High Airfield" mode is activated, the threshold is set to 15,500 feet (± 500 feet); this mode is compatible with LFE up to 15,000 feet.

The "High Airfield" mode is automatically activated any time the cabin pressure can reach values above the 14,000 feet equivalent pressure, except in decompression cases.

- On ground, this mode is activated if the cabin pressure altitude is above 14,000 feet.

- In flight, the "High Airfield" mode is activated if the barometric corrected landing/takeoff airport LFE is equal to or above 14,000 feet, and if the cabin pressure altitude is above 12,000 feet, and if the aircraft altitude is below 25,000 feet.

The oxygen system deployment threshold is reset to normal mode whenever one of these conditions is not met anymore.

Reasons why Granting this Request Would be in the Public Interest

Whereas Dassault Aviation is not an American aircraft manufacturer, its completion center, Dassault Falcon Jet (DFJ), is a large American facility settled for a long time within the United States aircraft industry. In addition, as for all Dassault Aviation Falcon aircraft programs, the Falcon 5X program involves numerous US companies as aircraft systems, airframe, and service suppliers. Falcon 5X business will increase the already established Falcon business which represents thousands of jobs over the United States.

Denial of this petition would negatively impact the ability of the Falcon 5X to compete with other airplanes in the executive market that have already been granted with exactly

the same exemption. This will adversely impact the economy and employment of French and US companies, which would be against the public interest.

Reasons why granting the exemption will not adversely affect safety

This exemption would provide the required automatic oxygen protection to the Falcon 5X passengers flying to and from high elevation airports with LFE above 14,000 feet and maintain the level of safety intended by the rule. This "High Airfield" mode of the passenger oxygen mask deployment threshold will reduce the occurrence of inadvertent deployment.

Additional Information

In the scope of this petition, Dassault Aviation takes benefit from previous grants of exemption issued by the FAA dealing with the setting of oxygen mask deployment setpoint above 15,000 feet for high airfield operations. Please note that the FAA has previously granted such exemptions to several models with much larger passenger capacity than the Dassault Falcon 5X Series.

Exempt. No	Issue Date	Expir. Date	FAA Office	Disp.	Regulation	Petitioner	Aircraft
6076	04/26/1995	(NoExpire)	(NA)	Granted	25.841(a) 25.1447(c)(1)	The Boeing Company	B757
6994	09/16/1999	(NoExpire)	(NA)	Partially Granted	25.1447(c)(1)	Airbus Industrie	A319, A320, A321
8668	12/02/2005	(NoExpire)	(NA)	Granted	25.1447(c)(1)	The Boeing Company	B737
9801	12/12/2008	(NoExpire)	(NA)	Granted	25.1447(c)(1)	The Boeing Company	B787
10044	04/01/2010	(NoExpire)	(NA)	Granted	25.1447(c)(1)	Gulfstream Aerospace Corporation	GIV-X GV-SP

Request for waiver from publication and comments

Considering the above listed exemptions, it is Dassault Aviation's opinion that the requested exemption is identical to exemptions granted previously and that granting this petition would not set a precedent. As a result, Dassault Aviation respectfully requests that action on this petition should not be delayed by publication and comment procedures.

Exercise of Exemption Privileges and Operation Outside of the United States

Falcon 5X aircraft will be operated all over the world by its US registered operators; therefore, Dassault Aviation requests to exercise the privileges of the exemption outside the United States.

Federal Register publication

The FAA has determined that good cause exists for waiving the requirement for *Federal Register* publication for public comment because the request is identical in all material respects

to previously granted exemptions; the exemption, if granted, would not set a precedent; and any delay in acting on this petition would be detrimental to Dassault Aviation.

The FAA's analysis

The FAA considers that granting this petition is in the public interest for the reasons stated by the petitioner and because this exemption is effectively identical to previously granted exemptions.

The petitioner requests an exemption for the Dassault Aviation Falcon 5X series airplanes and seeks relief from the requirement of § 25.1447(c)(1), which states that oxygen-dispensing equipment for occupants must be automatically presented before the cabin-pressure altitude reaches 15,000 feet. The petitioner's current design of the passenger oxygen system has only one pressure altitude set point of 14,500 feet, ± 500 feet (accounting for sensor tolerance), thus ensuring automatic presentation of oxygen masks before cabin altitude reaches 15,000 feet. The petitioner's proposed design of the passenger oxygen system provides for a second pressure altitude set point of 15,500 feet, ± 500 feet. For operation of the Dassault Aviation Falcon 5X series airplane into and out of an airport with a landing field elevation above 14,000 feet, the cabin pressure control system automatically commands the passenger oxygen system to use this second set point when any one of the following conditions is true:

- Airplane is on the ground and the airplane pressure altitude is above 14,000 feet; or
- Airplane is in flight below 25,000 feet while the barometric corrected landing/take-off airport elevation is equal or above 14,000 feet and the cabin pressure altitude is above 12,000 feet.

The FAA's decision

In consideration of the foregoing, I find that a partial grant of exemption is in the public interest. Therefore, pursuant to the authority contained in 49 U.S.C. §§ 40113 and 44701 delegated to me by the Administrator, I grant Dassault Aviation an exemption from the requirement of 14 CFR 25.1447(c)(1) that the passenger oxygen equipment be automatically presented before the cabin pressure altitude exceeds 15,000 feet. For Dassault Model 5X series airplanes, this grant of exemption will permit passenger oxygen masks to be automatically presented before the cabin pressure altitude exceeds 16,000 feet when operating into and out of airports with altitudes above 14,000 feet. This exemption is granted to the extent necessary to reduce the occurrence of inadvertent deployment of oxygen masks.

Issued in Renton, Washington, on April 15, 2015.

/s/

Michael Kaszycki
Acting Manager, Transport Airplane Directorate
Aircraft Certification Service